Subject: Mathematics Grade: Seventh

Standard: #13 Technology

Key Concept: Use computers and calculators as tools to model, understand, and make decisions about the world.

Generalization: Students study the development of computers and the people who had a major impact on its development or use.

Background:

This lesson would be appropriate at the beginning of the year. Students will select a mathematician who made a major contribution to the development or use of the computer. Each group of students will research their selected mathematician and can select to prepare a written report, make an oral presentation, or complete an activity related to the mathematician.

Students choose a tier according to interest in a mathematician. Many books provide information about male mathematicians including most math texts. Three books which have information about female mathematics are Math Equals, ISBN#0-201-05709-3, Women, Numbers and Dreams, ISBN#0-938625-07-1, and Women and Numbers, ISBN# 0-933174-87-X. Each of these books provides activities for each mathematician.

The tiers below represent several female mathematicians which students might choose to investigate. However, this lesson is not limited to these tiers; there are many possible mathematicians. Female students should be encouraged to select a female mathematician.

This lesson is tiered in ***content and product*** according to ***interest***.

Tier I: ***Grace Hopper***
Tier II: ***Mary Boole***
Tier III: ***Ada Lovelace***
Tier IV: ***Kathi Dwelle***

Assessment:

For each product, written report, oral presentation, or math activity, a rubric should be prepared and given to the students. The written report rubric should include points for spelling, grammar, neatness, and correctness of the facts. The oral presentation rubric should include points for organization, eye contact, speech modulation, poise, and correctness of the facts. The activity rubric will depend on the activity selected. A good source for help preparing rubrics is the software *StandardWriter* available from The Curriculum Project, www.curriculumproject.com.